JOHN SPELLMAN
Governor

DONALD W. MOOS
Director

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
4350-150th Ave. N.E. • Redmond, Washington 98052 • (206) 885-1900

July 2, 1984

Mr. Melvin Miller
Technical Services Department Superintendent
Monsanto Company
9229 East Marginal Way South
Seattle, Washington 98108

RCRA/Dangerous Waste Compliance Inspection at
the Monsanto Company Facility (WAD009282302)
in Seattle, Washington, on May 2, 1984

Dear Mr. Miller:

Thank you for your time and cooperation during my inspection of the Monsanto Company facility in Seattle on May 2, 1984. I found the facility to be in compliance with the Washington State Dangerous Waste Regulations, WAC 173-303, during the inspection. I have enclosed a copy of my inspection report for your information and records.

I have also enclosed a blank Notification of Dangerous Waste Activities form for you to fill out and submit to this department in order to reflect the facility's generation of WT02 wastes. A new form must be submitted whenever regulated waste streams which have not yet been reported on a notification form are generated at the facility.

During the inspection I reviewed copies of the facility's records and hazardous waste management plans for compliance with WAC 173-303. All of the plans adequately complied with the regulatory requirements. However, the facility's closure plan should be amended slightly to provide a clearer estimate of the maximum inventory of wastes in storage at any time during the life of the facility (see page IV-4 of the enclosed inspection report). Please send me a copy of such an amendment as soon as possible.

Please also send me a copy of each of the following facility documents within 30 days of the date of this letter:

1. Hazardous Waste Contingency Plan,
2. Hazardous Waste Training Plan,
3. Closure Plan,
4. Inspection Schedule, and
5. Waste Analysis Plan.

In its oversight of the State's Dangerous Waste program, the U.S. Environmental Protection Agency (EPA) has mandated that copies of the above plans must be reviewed by this department and maintained in the department's files. If you wish to submit such copies as Confidential documents, please so indicate upon your submittal.

Thank you again for your cooperation in this matter. Don't hesitate to contact this office at (206) 885-1900 if you have further questions.

Sincerely

Julie Sellick

Julie Sellick
Hazardous Waste Inspector/Specialist
Environmental Quality

JAS:ph

cc: Tom Cook, WDOE Headquarters
Pat Lee, WDOE Headquarters

RCRA/WAC 173-303 DANGEROUS WASTE

COMPLIANCE CHECKLIST/QUESTIONNAIRE

Industry name and address:

Monsanto Company
9229 East Marginal Way South
Seattle, Washington

Date: May 2, 1984

EPA/State Identification Number:
WAD009282302

County: King Zip: 98108 Telephone: (206) 764-4481

Physical Location of Facility (if different than above):

Facility Contact(s) Present During Inspection		
Name	Title	Phone No.
Mr. Melvin Miller	Technical Services Dept. Superintendent	(206) 764-4481

Inspected by:

Julie Sellick (WDOE) (206) 885-1900
Larry Sims (WDOE) (206) 885-1900
(Printed) (Phone Number)

I. Notification, Part A and Core Information

1. Notification filed: _____ Date: _____
2. Part A application filed: Yes Date: November 18, 1980
3. Classified as:

Generator	✓	Disposal facility	
Transporter		Transfer facility	
Treatment facility		Recycler	
Storage facility	✓	Other	

Comments:

4. Have any changes in Notification or Part A been filed? Yes Date(s): Part A: September 30, 1982

5. Does facility generate a solid waste(s) or receive a solid waste as defined by WAC 173-303-040? Generates

6. Is this waste(s) designated under WAC 173-303, and not RCRA? Under both

7. Under what section, in WAC 173-303, are waste(s) designated?

a.	Discarded Chemical Products (081)	
b.	Dangerous Waste Sources (082)	
c.	Dangerous Waste Mixtures (084)	
d.	Toxic Dangerous Wastes (101)	✓
e.	Persistent Dangerous Wastes (102)	
f.	Carcinogenic Dangerous Wastes (103)	
g.	Dangerous Waste Characteristics (090)	
	(1) Ignitability	
	(2) Corrosivity	✓
	(3) Reactivity	
	(4) EP Toxicity	

Remarks: No. 7d: WT02, Toxic Dangerous Wastes (D)

No. 8: Amounts below equal dangerous wastes generated during 1983.

8. Dangerous Wastes listed on Part A application, or for generators, dangerous wastes generated.

	D.W. No.	Amount	Waste Description	Disposal Method
a.	D002	5900 T	Black liquor solids from vanillin manufacture (sludge)	Transported to Chem-Security Systems, Inc., in Arlington, Oregon, for disposal.
b.				
c.	D002	175 T	Strainer solids contaminated with copper from vanillin manufacture (solid)	
d.				
e.				
f.	WT02	511 T	Still bottoms from vanillin manufacture (solid)	
g.				
	WT02	31 T	Phenolic contaminated mineral oil from vanillin manufacture (liquid)	

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9. Have these wastes been analyzed for determination of degree of hazard? Yes

If so, by whom? Am Test in Seattle conducted fish bioassay tests for them

10. Has facility petitioned, through RCRA 260.22 or WAC 173-303-910(3), to remove designation from a waste? No

If yes, explain:

11. This facility: ☒ Complies ☐ Does not comply with Interim Status Standards.

Comments: No. 1 : They need to file a new Notification of DW Activities form to add "WT02" to the types of waste generated by the facility.

No. 8: A waste shipment is transported from this facility about once each week. The Black Liquor Solids (VBLS) are pumped directly from the tank accumulate in and transported off site to the Arlington facility; there is no on-site storage of these wastes. The Strainer Solids and the Still Bottoms (900-pound blocks) are stored in piles on a concrete pad at the facility and shipped off site periodically. The Phenolic Contaminated Mineral Oil is handled in drums on site and pumped from the drums by the transporter for transport to Arlington. Such shipments occur about once every 2 months. The DOT-approved drums are then reused on site for the same purpose. Mr. Miller is investigating recycling options for this material, but must obtain clearance from Monsanto corporate headquarters before he can actually arrange for off-site recycling of this material.

Signature of Inspector: Julie Hellink (June 14, 1984)

XI. Standards Applicable to GENERATORS of Dangerous Waste - RCRA 262/WAC 173-303-170 to 230

	Yes	No
1. Does generator transport its own waste?		✓
a. Is waste ever given to "outside" contractor?	✓	
EPA/State I.D. No: (Contractor(s))	WAD007942733	
Name and address:	Inland Transportation 6737 Corson Ave. S. Seattle, Washington 98108	See Page II-1a

Note: (If facility transports own waste, look at standards applicable to transporters, section XII)

2. Is generator following RCRA/WAC 173-303 manifest system?	✓	
a. Is signature of, and date of acceptance by transporter obtained prior to transport?	✓	
b. Does generator retain one copy of manifest in accordance with WAC 173-303-180(3), Manifest Procedures?	✓	
c. Are manifests (signed by the generator, transporter, and designated disposal facility) kept for a minimum of three years (WAC 173-303-210(1))?	✓	
3. Does generator operate a specific area for container handling or storage?	✓	

If yes, describe: See "Comments" on page II-5

a. Does generator comply with the requirements set forth in WAC 173-303-200 governing on-site waste accumulation:	DNA	
(1) Labeling and marking		
(2) Dating		
(3) Inspections (must be done weekly for containers) WAC 173-303-630(8)?		

EPA/State I.D. No:
Contractors
Name and Address:

ORT 420011793
Secured Resource Transport
12486 SE 93rd Avenue
Clackamus, Oregon
97051

ORD980579015
Secured Resource Transport
7803 SE Ramona
Portland, Oregon
97202

EPA/State I.D. No:
Contractors
Name and Address:

ORD089452353
Chem-Security Systems, Inc.
Star Route
Arlington, Oregon
97812

WAD991281767
Crosby & Overton
20245-76th Ave. S.
Kent, Washington
98031

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EPA/State I.D. No:
Contractors
Name and Address:

ORD004872404
Inland Transportation
10145 N. Portland Road
Portland, Oregon 97203

WAD007942733
Inland Transportation
6737 Corson Ave S.
Seattle, Washington
98108

	Yes	No
b. Are incompatible wastes or other materials segregated?	✓	
4. Is entity familiar with Generator Reporting Procedures, (WAC 173-303-220)?	✓	
a. Annual Reports (WAC 173-303-220(1))	✓	
b. Exception Reports (WAC 173-303-220(2))	✓	
c. Spills and Discharges into the Environment (WAC 173-303-145)	✓	
5. Is generator aware of and complying with regulations concerning the preparation of Dangerous Waste for transport?		
a. Packaging: 49 CFR 173, 178, 179, and with requirements of UTC and WSP	✓	
b. Labeling: 49 CFR 172	✓	
c. Marking: 49 CFR 172	✓	
d. Placarding: 49 CFR 172 Subpart F	✓	

NOTE: Containers with ≤ 110 gallons of Dangerous Waste must be marked with the following or essentially equivalent, words and information, displayed in accordance with 49 CFR 172.304:

DANGEROUS WASTE - State and Federal Law prohibits improper disposal. If found, contact the nearest police or public safety authority, and the Washington State Department of Ecology or the U.S. Environmental Protection Agency.

Generator's Name and Address

_____

_____

Manifest Document No. _____

Comments: No. 3b: No incompatible wastes are stored in the waste piles or on the concrete pad (see "Comments" on page II-5).

No. 4b: They have a log system for tracking waste shipments to ensure compliance with the exception report requirements. They have not had to file an exception report to date.

	Yes	No
6. Are any wastes generated at this facility being transported or stored prior to being recycled, reclaimed, or recovered (WAC 173-303-120)?		✓
a. If yes, what are they? _____		
b. Do they exhibit any of the Dangerous Waste characteristics?		
Note: If not, they are regulated.		
7. Does generator store dangerous waste over 90 days for either transport, treatment or disposal?	Maybe	
If yes, what are they? Still bottoms (solid) from vanillin manufacture — in the form of 900-pound blocks		
(if yes, go to IV, Standards for TSD Facilities)		
8. Does generator follow the operating procedures for containers as outlined in WAC 173-303-160, containers?	DNA	
i.e. Triple rinsing, resulting in less than 1% volume or 1 inch product remaining.		
9. Preparedness and Prevention (WAC 173-303-200(6)).		
a. Is an emergency communication system readily available in areas where wastes are stored or handled (WAC 173-303-340)?	✓	
b. Are portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment readily available (WAC 173-303-340(1)(c))?	✓	
c. Have arrangements been made with local police, fire departments, and emergency response teams to familiarize them with the facility layout and the properties of the dangerous wastes handled (WAC 173-303-340(4))?	✓ See "Comments" on page II-5	

Comments: No. 7: They applied for interim status so they would not have to keep track of the 90-day temporary storage time limit for generators. Mr. Miller believes that specific particles of waste (Stranner Solids and Still Bottoms) probably are not stored for more than 90 days, but he cannot certify that.

No. 9a: Phone system and emergency alarm system

No. 9b: Fire extinguishers and foam

	Yes	No
10. Contingency Plan and Emergency Coordinator (WAC 173-303-200(6)).		
a. Does the facility have a Contingency Plan which is designed to minimize the consequences of any unplanned release of Dangerous Waste (WAC 173-303-350)?	✓	
b. Does the facility have an Emergency Coordinator, and if so, their name Mr. Melvin Miller	✓	
c. Is this Emergency Coordinator, or his designee, familiar with the requirements stated in WAC 173-303-360, Emergencies?	✓	
d. Does contingency plan contain a list of all emergency equipment, its location(s), and a brief outline of its capabilities (WAC 173-303-350(3)(e))?	✓	
If not, explain:		
11. Personnel Training (RCRA 262.34(a)(5))		
a. Does facility have a training program that instructs facility personnel in such a way that ensures compliance with RCRA and WAC 173-303?	✓	
(1) Do facility personnel participate in an annual review of the training provided in the training program?	✓	
(2) Does the program include training in the following areas, where applicable?		
(a) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment.	✓	
(b) Key parameters for automatic waste feed cut-off systems.	DNA	
(c) Communications or alarm systems.	✓	
(d) Response to fire or explosions.	✓	
(e) Response to ground water contamination.	DNA	
(f) Shut down of operations.	DNA	

	Yes	No
b. Does facility have a written training plan which includes the following documents and records:	✓	
(1) For each position related to dangerous waste management; the job title, job description (including qualifications), and the name of the employee.	✓	
(2) A written description of the type and amount of both introductory and continuing training for that position.	✓	
(3) Records documenting that facility personnel have received and completed the training required by WAC 173-303-330.	✓	

Comments: No. 1a: Transporters listed on 1983 DW Annual Report

No. 3: The waste pile containment area consists of a reinforced concrete pad (~1 foot thick) with 4 foot high concrete walls (~1 foot thick) on 2 sides (N & W sides) and a run-off collection system (sump) on the south side. The concrete pad and asphalt road slopes to the 2000-gallon capacity sump. The strainer solids and still bottoms are stored in separate piles in the NW corner of the pad (near the corner of the concrete wall). See page I-3.

No. 3a(3): Refer to pages IV-3 and IV-11.

No. 9a: The Seattle Fire Dept., Fire District 1, is familiar with the facility and has a copy of both the facility's Emergency Evacuation Plan and Contingency Plan.

Nos. 10 and 11: Copies of the Contingency Plan, and Training Program and Plan were reviewed on site during the inspection.

No. 10a: The Dangerous Waste Contingency Plan is part of the facility's SPCC plan.

No. 11a(2d) Regarding toluene and alcohol fires or explosions.

RCRA/WAC 173-303 DANGEROUS WASTE

COMPLIANCE CHECKLIST/QUESTIONNAIRE

IV. Standards Applicable to Dangerous Waste TREATMENT, STORAGE and DISPOSAL Facilities, WAC 173-303-280 to 395

	Yes	No
1. Has facility obtained an EPA/state identification number?	✓	
2. Are dangerous wastes accepted from "outside" sources (wastes not generated on site)?		✓
a. If yes, has a chemical and physical analysis of a representative sample been obtained in accordance with RCRA 265.13 and WAC 173-303-300?		
b. Does the facility confirm that each Dangerous Waste received at the facility matches the identity of the waste on the manifest?		
3. Has facility obtained a detailed chemical, physical, and/or biological analysis of his waste prior to storing, treating, or disposing of it (WAC 173-303-300(2))?	✓	
Describe:		
4. Does the facility follow a Written Waste Analysis Plan containing:		
a. Parameters to be tested?	✓	
b. Methods of analysis?	✓	
c. Methods to obtain representative samples?	✓	
d. Testing frequency?	✓	

Comments: No. 4d: Whenever process changes

	Yes	No
5. Security		
a. Have site owner/operators taken appropriate measures to ensure against unauthorized entry?	✓	
(1) Are signs posted at each entrance to active portion, and at other locations, in sufficient numbers to be seen by any approach?	✓	
(2) Are they legible from a distance of 25 feet or more?	✓	
(3) Does the facility have a 24-hour surveillance system or Artificial or natural barrier/or combination of both, to control access to the active portion?	✓	
6. Are incompatible wastes segregated to ensure against accidental ignition, fuming, etc. (WAC 173-303-395)?	DNA	✓
a. Are ignitable or reactive wastes kept a minimum of 50 feet away from the site property line?		
b. Is this compliance with WAC 173-303-395 documented in the operating record?		
c. Are yearly inspections carried out where ignitable or reactive wastes are stored?		
d. Is their inspector familiar with the Uniform Fire Code, or is he a local, state, or Federal Fire Marshal?		

Comments: No. 5a(3): Security 24 hours per day 7 days per week
Camera at front gate

	Yes	No
7. Has the facility a written inspection schedule (RCRA 265.15/WAC 173-303-320(2))?	✓	
a. Does it include inspecting all:		
Monitoring equipment?	✓	
Safety and emergency equipment?	✓	
Security devices?	✓	
Detection equipment?	✓	
Dangerous waste storage areas?	✓	
b. Is this inspection schedule maintained at the facility?	✓	
c. Is an inspection log maintained?	✓	
(1) Is the log, or its summary, kept at the facility for at least three years from the date of inspection?	✓	
8. Operating Record		
a. Does the owner/operator of the facility maintain an operating record at the facility (RCRA 265.73/ WAC 173-303-380))?	✓	
b. Does the record contain the following information:		
(1) A description of, and the quantity of each Dangerous Waste received, and the method(s) and date(s) of its treatment, storage, or disposal at the facility?	DNA	✓
(2) The location of each Dangerous Waste within the facility, and its quantity?	✓	
(3) A map showing disposal sites?		✓ DNA
(4) Summary reports and details of all incidents that require implementing the Contingency Plan?		

Comments: No. 7a: Automatic monitor in the sump pump

No. 8b(4): The Contingency Plan has not been utilized to date

	Yes	No
Operating Record (Continued)		
(5) Records and results of inspections as required by WAC 173-303-360(2)(d), General Inspection (need only be kept three years)?	✓	
(6) All closure and post-closure cost estimates required for the facility?	✓	
(7) The results of testing and waste analysis?	✓	
9. Facility Reporting Procedures (WAC 173-303-390)		
a. Has the owner/operator prepared and submitted a single copy of the Annual Report to the WDOE by March 1 of each year? (The report form and instructions in Facilities Report Form - Part B must be used for this report, and is available from the department.)	✓	
b. Is owner/operator familiar with requirements for unmanifested reports, if applicable?	✓	
c. Is owner/operator familiar with procedures for emergencies (WAC 173-303-360(2))?	✓	
10. Closure and Post-Closure		
a. Has the facility developed a closure plan which outlines all necessary steps to safely close the facility (RCRA 265.112)?	✓	
Does it contain the following:		
(1) A description of how and when the facility will be partialy closed (if applicable) and finally closed?	✓	
(2). An estimate of the maximum inventory of wastes in storage and in treatment at any time during the life of the facility?	✓	
(3) A description of the steps needed to decontaminate the facility equipmnet during closure?	✓	

Comments: No. 8b(6): These estimates are prepared for this facility by Monsanto corporate headquarters.

No. 10 a (2): This section requires expansion.

	Yes	No
11. Financial Requirements (RCRA 265.140)		
a. Has owner/operator prepared a written estimate of the cost of closing the facility in accordance with the closure plan (RCRA 265.112)?	✓	
(1) Is this cost estimate annually adjusted?	✓	
b. Has owner/operator established financial assurance for the closure of the facility (RCRA 265.143)?	✓	
(1) By what method has this been achieved:		
a. Trust fund		
b. Surety bond		
c. Letter of credit		
d. Insurance		
e. Financial test or corporate guarantee	✓	
f. Multiple mechanisms		
if so, state methods used _____		
(2) Has owner/operator submitted a copy of financial assurance to Regional Administrator (or WDOE)?	✓	
(3) Is wording of the financial assurance statement identical to that specified in RCRA 264.151 (a) (1) Trust fund		
(b) Surety bond		
(c) Letter of credit		
(d) Insurance		
(e) Financial test	✓	
(f) Corporate guarantee		
265.143 (g) Multiple Financial Mechanism		
Note: (Ask for copy of assurance statement if department does not have one.)		
c. Has the owner or operator of the Hazardous Waste treatment storage, or disposal facility obtained and maintained liability insurance for sudden occurrences in the amount of at least $1 million per occurrence with an annual aggregate of at least $2 million?	✓	

	Yes	No
d. Has the owner or operator of the Hazardous Waste treatment, storage, or disposal facility obtained and maintained liability insurance for nonsudden occurrences in the amount of at least $3 million per occurrence with an annual aggregate of at least $6 million?	✓	

12. Financial Requirements for Post-Closure Care (RCRA 265.144) (Disposal Facilities Only)

a. Has owner/operator prepared a written estimate of the cost of post-closure monitoring and maintenance of the facility (RCRA 265.144)?	✓	
(1) Is this cost estimate annually adjusted?	✓	
b. Has owner/operator established financial assurance for the post-closure care of the facility (RCRA 265.145)?	✓	

(1) By what method has this been achieved:

a. Trust fund	
b. Surety bond	
c. Letter of credit	
d. Insurance	
e. Financial test or corporate guarantee	✓
f. Multiple mechanisms	

if so, state methods used _____

Comments: No. 11 b (2) : To EPA, Region 10

No. 11 c : Monsanto is self-insured

No. 11 d : Monsanto is self-insured

			Yes	No
(2)	Has owner/operator submitted a copy of financial assurance to Regional Administrator (or WDOE)?		✓	
(3)	Is wording of the financial assurance statement identical to that specified in RCRA 264.151	(a) (1) Trust fund		
		(b) Surety bond		
		(c) Letter of credit		
		(d) Insurance		
		(e) Financial test	✓	
		(f) Corporate guarantee		
	265.145	(g) Multiple Financial Mechanism		
(4)	Has owner/operator satisfied the financial assurance requirements by using a mechanism that takes into account both closure and post-closure care (RCRA 265-140)?		✓	

if so, state method(s) used Financial Test Mechanism

Comments: No. 12 b (4) : Certified by an independent accountant

		Yes	No
13.	Management of Containers (RCRA 265.170/WAC 173-303-630, Final Status)	DNA	
a.	Are container storage areas inspected weekly for leaks and container deterioration (RCRA 265.174)?	✓	
b.	If systems are uncovered, do they have positive drainage control and sufficient capacity to contain 110 percent of the volume of the largest container, (final status)?	✓	
c.	If the facility stores EHW, is it protected from the elements by means of a building or other protected covering (final status)?	DNA	
d.	Are containers marked or labeled in a manner equivalent to 49 CFR 172 subpart E?	DNA	

Comments: No. 13 : The Phenolic Contaminated Mineral Oil is handled in drums on site and pumped from the drums by the transporter for transport to Arlington, Oregon. The DOT-approved drums are then reused on site for the same purpose.

		Yes	No
16.	Waste Piles (RCRA 265.250)		
a.	Are dangerous wastes held in piles?	✓	
	If yes, describe Yes, D002 (strainer solids) and W102 (still bottoms) - see page I-2		
b.	Is the waste pile(s) designed to prevent wind or water dispersion (where applicable)?	✓	
c.	Is leachate or run-off dangerous per WAC 173-303?	Possibly - see Comments below	
	If so, what are its properties? Possibly W102 and/or D002		
	(1) Is run-on diverted from waste pile(s)?	✓	
	(2) Do waste pile(s) have a containment system?	✓	
	(3) Does containment system consist of leachate and run-off collection and control system?	✓	
	If yes, describe: Everything drains to a collection sump - sump contents are automatically pumped to the process system		
	(4) Is leachate treated and/or discharged via point source?		✓
	How is it treated? It's run back through the process		
	(5) Is the base of the pile lined or is it located on an impermeable base?	✓	
d.	Are ignitable, reactive, or incompatible wastes held in waste piles?		✓
	If so, refer to RCRA 265.256 and 265.257.		

Comments: No. 16 c : All leachate and run-off are collected and pumped back through the process

No. 16 b & c(1) : A concrete wall around the north and west sides of the pile provides protection from wind and run-on. The wall is four feet high and ~ 1 foot thick

No. 16 c(5) : The pile base is constructed of reinforced concrete about 1 foot thick.